Project	Name:	S1012 EBR L	rılııng			
		<u></u>				Boring ID: LSZ43-EBR
Project	Numbe	r: <u>9101110001.5</u>	5310.02	D	ate:5-2	2-16
	Location		12			Logged By: Garrett Tabor
	ion and D					Project Manager: Gwen Minnier
	Start Da					Drilling Contractor: Yellow Jacket Drilling
	Depth (ft l	tion Date: 5-22- ogs): 226	-10			Drilling Method: Sonic Drilling Equipment: 6" I.D., 8" O.D.
	to Water)			Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
0						Hand Auger
				<u> </u>		
				-		
5						
				ļ		
10	- 1, 43 .T-		0.0		SP-SM	POORLY GRADED SAND WITH SILT & GRAVEL, 75% predominantly fine
			0.0		0. 0	to medium grained, subangular to subrounded sand, 15% fine grained,
						subangular to subrounded gravel, 10% silt, uncemented, nonplastic, brown, dry, no odor, no stains
						dry, no odor, no stains
				-		
				l		
15						
10			0.0			
				-		
				<u> </u>		
					SM	SILTY SAND, 75% fine to medium grained, subangular to subrounded
						sand, 20% silt, 5% clay, moderately cemented, nonplastic, brown, dry, no odor, no stains
						Odor, no stains
20			0.0			
			0.0			
				<u> </u>		
				-		
				-		
				-		

Page 1 **of** 10

Project	Name:	S1012 EBR L	rilling			Boring ID: LSZ43-EBR
	,					
		r: 9101110001.5		D	ate:5-2	
	Location on and D		12			Logged By: Garrett Tabor Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
		tion Date: 5-22	-16			Drilling Method: Sonic
Total D	epth (ft to to Water	ogs): 226 (ft bgs): ~146	<u> </u>			Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
	to water	(it bg3).	, 			Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
25					SM	SILTY SAND, continued
						note: weakly cemented below 26'
						note: weakly cernented below 20
30			0.0			
					CD CM	DOODLY CDARED CAND WITH OUT 8. CDAVEL and descine with complete
					SP-SM	POORLY GRADED SAND WITH SILT & GRAVEL, predominantly very fine to medium grained, subangular to subrounded sand, 10% silt, 10% fine
						grained, subangular to subrounded gravel, uncemented, nonplastic, brown,
						dry, no odor, no stains
						note: zone of weakly to moderately cemented from 33' to 36'
35						
			0.0			
				<u> </u>		
					SM	SILTY SAND, 75% very fine to medium grained, subangular to subrounded
						sand, 20% silt, 5% clay, uncemented to weakly cemented, nonplastic, brown, dry, no odor, no stains
40			0.0			
					-	
45				<u> </u>		
45			0.0			
					<u> </u>	
50						

Project	Name:	S1012 EBR L	rilling			p : ID \$7/3_ERP
						Boring ID: LSZ43-EBR
		r: <u>9101110001.5</u>		D	ate: ⁵⁻²	
	Location		12			Logged By: Garrett Tabor Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
Drilling	g Comple	tion Date: 5-22	-16			Drilling Method: Sonic
Total D	epth (ft l to Water	bgs): 226 (ft bgs): ~146				Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
Бери	to mater	(it bgs). ~ 140	,			Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
50			0.0		SM	SILTY SAND, continued
						note: lens of fine grained sand & gravel from 52'6" to 53'
						note: moderately cemented from 54' to 56'
55			0.0			
60			0.0		SC	CLAYEY SAND, 75% very fine to medium grained 20% clay, 5% silt, uncemented, low plasticity, brown, moist, no odor, no stains
						note: weakly to moderately cemented from 62' to 66'
65			0.0			
70			0.0			
			0.0			
					SP-SM	POORLY GRADED SAND WITH SILT, 90% very fine to medium grained
					OI OIVI	sand, 10% silt, uncemented, nonplastic, brown, dry, no odor, no stains
75						

Page 3 **of** 10

Project	Name:	S1012 EBR L	Jrilling				
						Boring ID: LSZ43-EBR	
Project	Numbe	r: <u>9101110001.</u> 5	5310.02	D	ate: 5-2	2-16	
	Location					Logged By: Garrett Tabor	
	ion and D					Project Manager: Gwen Minnier	
	Start Da					Drilling Contractor: Yellow Jacket Drilling	
	g Comple Depth (ft l	etion Date: 5-22 bgs): 226	-16			Drilling Method: Sonic Drilling Equipment: 6" I.D., 8" O.D.	
Depth	to Water	(ft bgs): ~146	3			Sampling Method: Continuous Core	
		(10 2 9 2) 1 1 1 1	ĺ		T	Contanuous Coro	
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.	
75			0.0		SP-SM	POORLY GRADED SAND WITH SILT, continued	
						note: occasional fine grained gravel present below 76'	
				-			
80							
			0.0				
				 			
					SM	SILTY SAND, 70% very fine to medium grained, subangular to subrounded	
					OW	sand, 25% silt, 5% clay, uncemented, nonplastic, brown, dry, no odor, no	
				<u> </u>		stains	
85			0.0			note: weakly cemented zone from 84' to 86'	
			0.0				
90			0.0				
			0.0	-			
				-	-		
				-	-		
						note: low plasticity, 10% clay, less sand from 94' to 96'	
95							
			0.0				
				 		note: weakly cemented from 96' to 100'	
						•	
					-		
100							
100							

Project	Name:	S1012 EBR L	Jrilling					
						Boring ID: LSZ43-EBR		
Project	Numbe	r: <u>9101110001</u> .:	5310.02		ate: 5-2	2-16		
	Location					Logged By: Garrett Tabor		
Elevati	on and D	atum: N/A				Project Manager: Gwen Minnier		
	Start Da					Drilling Contractor: Yellow Jacket Drilling		
	epth (ft l	tion Date: 5-22 ogs): 226	-16			Drilling Method: Sonic Drilling Equipment: 6" I.D., 8" O.D.		
	to Water		<u> </u>			Sampling Method: Continuous Core		
		(3-/-	<u> </u>	_		Contamadad Coro		
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.		
100			0.0		SM	SILTY SAND, continued		
						note: weakly cemented from 96' to 106'		
						note. Weakly cemented from 30 to 100		
105			0.0					
	1///				SC	CLAYEY SAND, 65% very fine to medium grained, subangular to		
						subrounded sand, 25% clay, 10% silt, uncemented, low plasticity, brown, moist, no odor, no stains		
110			0.0		SP-SM	POORLY GRADED SAND WITH SILT & GRAVEL, 80% predominantly very		
			0.0		0. 0	fine to medium grained, subangular to subrounded sand, 10% silt, 10% fine		
						grained, subangular to subrounded gravel, uncemented, nonplastic, brown, dry, no odor, no stains		
						ary, no odor, no stamo		
						note: weakly cemented at 114'		
115		***************************************	0.0					
			1.5					
					SM	SILTY SAND, 80% very fine to medium grained sand, 20% silt, weakly to		
						moderately cemented, nonplastic, brown, dry, no odor, no stains		

120			0.0					
			0.0					
		No second second						
125								

Project	Name:	S1012 EBR L	rilling			Boring ID: LSZ43-EBR
	,					
		r: <u>9101110001.</u>	5310.02	D	ate:5-2	2-16
	Location		12			Logged By: Garrett Tabor
	on and D Start Da		-16			Project Manager: Gwen Minnier Drilling Contractor: Yellow Jacket Drilling
		tion Date: 5-22				Drilling Method: Sonic
	epth (ft b					Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	5 	1	1	Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
125			0.1		SM	SILTY SAND, continued
						note: uncemented from 124' to 126'
					SC	CLAYEY SAND, 70% very fine to medium grained, subangular to subrounded sand, 20% clay, 10% silt, uncemented to weakly cemented, low plasticity, brown, moist, no odor, no stains
130			0.4			note: moderately cemented from 130' to 132'
135			0.4		SW-SM	note: fuel odor below 136' WELL GRADED SAND WITH GRAVEL & SILT, 65% very fine to coarse
145			1.9			grained, subangular to subrounded sand, 25% fine to coarse grained gravel, 10% silt, uncemented to weakly cemented, nonplastic, brown, dry, fuel odor, no stains note: encountered water BTOC at 145'

Project	Name:	21015 FRK D	rilling			Boring ID: LSZ43-EBR
Project	Number	r: <u>9101110001.5</u>	310.02	n	ate:5-2	
	Location				utc	Logged By: Garrett Tabor
Elevati	on and D	atum: N/A				Project Manager: Gwen Minnier
	Start Da					Drilling Contractor: Yellow Jacket Drilling
	epth (ft b	tion Date: 5-22- ogs): 226	16			Drilling Method: Sonic Drilling Equipment: 6" I.D., 8" O.D.
	to Water					Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
150	* * * * * * * * * * * * * * * * * * * *		138		SW-SM	WELL GRADED SAND WITH SILT & GRAVEL, continued
						note: cobble present at 153' & 155', fuel odor present
155			6.0			
	*****					note: 174° to 188° F at 156'
	*****					note: gravel content increased, fine to coarse grained, subrounded to
						subangular at 157'

						note: weakly cemented lens about 6" thick at 159'
160			1176	None	CL	CLAY WITH SAND, 85% clay, 15% fine to medium grained, subrounded to subangular sand, uncemented, medium plasticity, reddish-brown, slightly moist to moist, mild odor, no stains
				ļ		note: cementation increased, strongly cemented nodules at 162'
						,
				-		
165	7/////		270		SW	WELL GRADED SAND WITH GRAVEL, 60% fine to coarse grained,
			210		300	subrounded to subangular sand, 35% fine to coarse grained, subrounded to
	*****					subangular gravel, 5% silt to clay, uncemented, nonplastic, brown, wet, fuel
						odor (mild), no stains
	* * * * * * * * * * * * * * * * * * * *					

170			00.5			
			66.5			
	1/////				CL	CLAY WITH SAND, 80% clay, 20% fine to medium grained, subrounded to
						subangular sand, uncemented, medium plasticity, reddish-brown, slightly moist to moist, mild odor, no stains
						to moist, mile odor, no stains
						note: cementation increased at 172'
1	1/////	I		1	I	

Project	Name:	S1012 EBR L	rilling			Boring ID: LSZ43-EBR
		r: <u>9101110001.5</u>		D:	ate:5-2	
	Location on and D		12			Logged By: Garrett Tabor Project Manager: Gwen Minnier
Drilling	Start Da	ite: 5-22-				Drilling Contractor: Yellow Jacket Drilling
		tion Date: 5-22-	-16			Drilling Method: Sonic
	epth (ft t to Water		\			Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
		(10 29 2)		<u></u>		
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
175			461		CL	CLAY WITH SAND, continued
						note: sand content increased at 175'
						note: core fell out of core barrel when retrieved it was mostly composed of clay
						with sand sluff from 176' to 186'
180			388	None		
185						
105			208			
					CL	CLAY WITH SAND, 85% clay, 15% fine grained sand, weakly cemented,
						medium plasticity, reddish-brown, slightly moist, no odor, no stains
					SM	SILTY SAND, 80% fine to medium grained, subrounded to subangular sand, 20% silt, uncemented, nonplastic, gray, moist to wet, no odor, black to
190			164			gray staining,
195			26.4			
			36.4			
						note: core was boiling hot, stopped to assess safety from 196' to 206'
						note: after meeting, decided to take 1 bucket of soil per 10', because of
				None		intense heat
						note: mostly clay with sand, weakly cemented, dr, no odor, no stains from 196' to 206'
200				ll		

Project	Name:	S1012 EBR L	rilling			Boring ID: LSZ43-EBR
		0101110001	5240.00		. 50	
		r: <u>9101110001.</u> 5		Da	ate:5-2	
	Location on and D		12			Logged By: Garrett Tabor Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
		tion Date: 5-22				Drilling Method: Sonic
Total D	epth (ft l	ogs): 226				Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	}	·		Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
200					SM	SILTY SAND, continued
205				None		note: well graded sand, subrounded to subangular, wet, no odor, no stains from 206' to 216' note: pressure release, shut down for the day to find better solution
210						
215				None		note: well graded sand, no fuel odor, no oil in soil indication from 216' to 226'
220						
225						

roject	Name:	OTOTZ EDINE	Jilling			Boring ID: LSZ43-EBR
roject	Number	r: <u>9101110001.</u> 5	5310.02	D	ate:5-2	2-16
Boring	Location	n: STO				Logged By: Garrett Tabor
	on and D		40			Project Manager: Gwen Minnier
	Start Da	ate: 5-22 tion Date: 5-22				Drilling Contractor: Yellow Jacket Drilling Drilling Method: Sonic
	epth (ft l		-10			Drilling Equipment: 6" I.D., 8" O.D.
	to Water		3			Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
225					SM	SILTY SAND, continued
						Tota Depth = 226'
				-		
230						
				-		
235						
				-		
240						
240						
245						
252						
250					·	<u> </u>

Project	Name:	S1012 EBR L	rilling				S I S744-ERP
	,						Boring ID: LSZ44-EBR
Project	Numbei	r: <u>9101110001.</u>	5310.02	D	ate: _ ⁵⁻¹	0-16	
	Location					Logged By:	Kyle Keegan
	on and D		40			Project Manager:	Gwen Minnier
	Start Da	ite: 5-10 tion Date:	-10			Drilling Contractor: Drilling Method:	Yellow Jacket Drilling Sonic
	epth (ft b					Drilling Equipment:	6" I.D., 8" O.D.
	to Water		3		1	Sampling Method:	Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Nan [i.e. % by weig cemen	oil Classification, Description and Notes ne (USCS Symbol): material with description ght, gradation, angularity] starting with largest percent, tation, plasticity, color, moisture, staining, odor. ive information may be included in the soil description or notes.
0	777		0.0		SC	CLAYEY SAND, 70	% fine to medium grained, subrounded to subangular
							emented, nonplastic to low plasticity, red to brown, slightly
_							
5			0.0				
						nata: ailtu aand lana	at 41 think at 01
						note: silty sand lens	at I tilick at 9
10			0.0				
						note: sand clay lens	about 1'6" thick at 14'
15			0.0				
	1///		5.5				
	1///						
	1//					note: clay content in	creased at 18'
20			0.0		SM	SILTY SAND 80%	fine to medium grained, subrounded to subangular
			0.0		Olvi	sand, 20% silt, unce	mented, nonplastic, light brown, slightly moist, no odor, no
						stains	
1	1/////				CL	CLAY WITH SAND	70% clay, 30% fine to medium grained, subrounded to
						subangular sand, ur	cemented to weakly cemented, medium plasticity, red to
						brown, slighly moist,	no odor, no stains
25							

Project	Name:	51012 EBR L	rıllıng					
						Boring ID: LSZ44-EBR		
Project	Number	r: <u>9101110001.5</u>	5310.02	C	ate: <u>5-1</u>	0-16		
	Location on and D					Logged By: Kyle Keegan Project Manager: Gwen Minnier		
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling		
		tion Date:				Drilling Method: Sonic		
	epth (ft t to Water		1			Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core		
	to mate.	(it bgb). 140				Continuous Core		
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.		
25	/////		0.0		CL	CLAY WITH SAND, continued		
					SC	CLAYEY SAND, 80% fine to medium grained, subrounded to subangular		
						sand, 20% clay, uncemented, nonplastic to low plasticity, brown to red, slightly moist, no odor, no stains		
						moist, no odor, no stains		
30			0.0					
			0.0					
					SM	SILTY SAND, 75% fine to medium grained, subrounded to subangular		
						sand, 25% silt, uncemented, nonplastic, light brown, slightly moist, no odor, no stains		
						note: silt content decreased, coarse grained sand content increased at 34'		
25								
35			0.0					
					SP-SM	POORLY GRADED SAND WITH SILT, 90% fine to medium grained,		
						subrounded to subangular sand, 10% silt, uncemented, nonplastic, brown, slightly moist, no odor, no stains		
						Signay moist, no odor, no stallis		
40			0.0					
						note: coarse grained gravel content increased at 41'		
						materials y content in avecaged at 421		
						note: clay content increased at 43'		
45			0.0			note: clay with sand lens at 45'		
			0.0			note. day wan dand fond at 40		
	/////				CL	CLAY WITH SAND		
50								

Project	Name:	S1012 EBR L	rilling			Boring ID: LSZ44-EBR
		r: <u>9101110001.5</u>	310.02	D	ate: ⁵⁻¹	
	Location					Logged By: Kyle Keegan Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
		tion Date:				Drilling Method: Sonic
	epth (ft l to Water					Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
		(1. 29 0). 140				Contandodo Corc
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
50			0.0		CL	CLAY WITH SAND, 80% clay, 20% fine to medium grained, subrounded to subangular, uncemented to weakly cemented, medium plasticity, brown to red, slightly moist, no odor, no stains
						note: manganese-oxide staining at 53'
						note: sand content increased at 54'
55			0.0			
			0.0			
						note: cementation increased at 58'
						Hoto. Gorionidatori inorodosa de so
60			0.0			
						note: strongly cemented lens about 4" thick at 61'
						note: sand content increased at 63'
						note: silt content increased at 64'
65			0.0			
70			0.0			note: silt lens about 1' thick at 70'
					SM	SILTY SAND, 85% fine to coarse grained, subrounded to subangular sand, 15% silt, uncemented, nonplastic, brown, slightly moist, no odor, no stains
						, , , , , , , , , , , , , , , , , , , ,
					SM	note: silt content increased at 64' note: silt lens about 1' thick at 70'

Project	Name:	S1012 EBR L	rilling			
						Boring ID: LSZ44-EBR
Project	Numbe	r: 9101110001.5	5310.02	D	ate: 5-1	0-16
	Location					Logged By: Kyle Keegan
Elevati	on and D	Datum: N/A				Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
		etion Date:				Drilling Method: Sonic
	epth (ft l to Water					Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
Берат	to mater	140				Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
75			0.0		SM	SILTY SAND, continued
						note: silt content increased at 75'
						note: coarse grained sand content increased at 76'
80			0.0			CLAVIMITH CAND. 050/ alou 450/ fine aminod and an aloung the
			0.0	-	CL	CLAY WITH SAND, 85% clay, 15% fine grained sand, uncemented, medium plasticity, brown to red, slightly moist to moist, no odor, no stains
						modum pastory, srown to roa, digitaly motor to motor, no oddi, no oddino
0.5						note: cementation increased at 84'
85			0.0			
						note: manganese-oxide staining at 88'
	4////				ML	SILT WITH SAND, 80% silt, 20% predominantly fine grained sand,
00					1712	uncemented, low plasticity, brown, slightly moist, no odor, no stains
90			0.0			
				-		
						note: clay lens about 6" thick at 91'6"
					SM	SILTY SAND, 85% fine to medium grained, subrounded to subangular sand, 15% silt, uncemented, nonplastic, brown, slightly moist, no odor, no
						stains
95			0.0			
				-	CL	CLAY WITH SAND, 75% clay, 25% fine grained sand, uncemented, medium plasticity, red to brown, slightly moist, no odor, no stains
						mostant placticity, roa to brown, diightly molet, no odor, no stains
				<u> </u>		
100	7/////	L	L	L	l	

Project	Name:	S1012 EBR L	rilling			
						Boring ID: LSZ44-EBR
		r: <u>9101110001.5</u>	5310.02	D	ate: _ 5-1	
	Location					Logged By: Kyle Keegan Project Manager: Gwen Minnier
	on and D		-16			Project Manager: Gwen Minnier Drilling Contractor: Yellow Jacket Drilling
		tion Date:				Drilling Method: Sonic
	epth (ft l					Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	•		T	Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
100	/////		0.0		CL	CLAY WITH SAND, continued
						note: silt content increased at 102'
105						
103			0.0			
					ML	SILT WITH SAND, 85% silt (some clay), 15% fine grained sand, uncemented, low plasticity, brown, slightly moist, no odor, no stains
110						
110			0.0		SM	SILTY SAND, 75% fine to medium grained, subrounded to subangular sand, 25% silt, uncemented, nonplastic, brown, slightly moist, no odor, no stains
						note: fine grained, subrounded to subangular gravel content increased at 114'
115			0.0			
					CL	CLAY WITH SAND, 70% clay, 30% fine to medium grained, subrounded to subangular sand, uncemented to weakly cemented, medium plasticity, brown to red, slightly moist, no odor, no stains
120			0.0			
					ML	SILT WITH SAND, 80% silt, 20% fine grained sand, uncemented, low plasticity, brown, slightly moist, no odor, no stains

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Project	Name:	S1012 EBR L	rilling			
						Boring ID: LSZ44-EBR
Project	Numbe	r: <u>9101110001.5</u>	5310.02	D	ate:5-1	0-16
	Location on and D					Logged By: Kyle Keegan Project Manager: Gwen Minnier
	Start Da		-16			Project Manager: Gwen Minnier Drilling Contractor: Yellow Jacket Drilling
Drilling	Comple	tion Date:				Drilling Method: Sonic
	epth (ft l					Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	•			Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
125			0.0		ML	SILT WITH SAND, continued
					SC	CLAYEY SAND, 60% fine to medium grained, subrounded to subangular sand, 40% clay, uncemented, low plasticity, reddish-brown, slightly moist, no odor, no stains
130			0.0			note: strongly cemented nodules at 130'
						note: 6" thick lens of silty sand at 132'
	1/////				CL	CLAY WITH SAND, 80% clay, 20% fine grained sand, uncemented,
135			0.0			medium plasticity, brown, moist, no odor, no stains
					SM	SILTY SAND, 75% fine to medium grained, subrounded to subangular sand, 25% silt, uncemented, nonplastic, brown, moist, no odor, no stains
140			0.0			
						note: coarse grained sand content increased at 144'
145			0.0			note: fine grained, subrounded to subangular gravel content increased at 145'
					SW-SM	WELL GRADED SAND WITH SILT, 90% fine to coarse grained, subrounded to subangular sand, 10% silt, uncemented, nonplastic, brown, wet, no odor, no stains

Project	Name:	S1012 EBR L	rilling			
						Boring ID: LSZ44-EBR
Project	Number	r: <u>9101110001.</u> 5	5310.02	C	ate: 5-1	0-16
	Location					Logged By: Kyle Keegan
	on and D		10			Project Manager: Gwen Minnier
	g Start Da	ite: 5-10- tion Date:	-10			Drilling Contractor: Yellow Jacket Drilling Drilling Method: Sonic
	epth (ft l					Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	}	1	-	Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
150	* * * * * * * * * * * * * * * * * * * *		0.0		SW-SM	WELL GRADED SAND WITH SILT, continued
						note: coarse grained sand & fine to coarse grained, subrounded to subangular gravel content increased at 150'
155			0.0			note: clay lens about 4" thic at 155'
	7/////				CL	CLAY, 90% clay, 10% fine grained sand, moderately cemented, medium
160			0.0			plasticity, red to brown, slightly moist, no odor, no stains note: cementation decrease (uncemented to weakly cemented) at 160'
165			0.0			note: cementation decreased (uncemented) at 165'
170			0.0			note: weakly cemented nodules at 169' note: silt with sand lens about 1' thick at 171'
					SM	SILTY SAND, 75% fine to medium grained, subrounded to subangular sand, 25% silt, uncemented, nonplastic, brown, moist to wet, no odor, no stains

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Project	Name:	S1012 EBR L	rilling			
						Boring ID: LSZ44-EBR
Project	Numbe	r: <u>9101110001.</u> 5	5310.02	D	ate: ⁵⁻¹	0-16
Boring	Location					Logged By: Kyle Keegan
	on and D					Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
	epth (ft l	tion Date:				Drilling Method: Sonic Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	,			Sampling Method: Continuous Core
		<u> </u>		est <, None)	oil tion	Soil Classification, Description and Notes Name (USCS Symbol): material with description
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	[i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
175			0.0		SM	SILTY SAND, continued
					SC	CLAYEY SAND, 65% fine to medium grained, subrounded to subangular sand, 35% clay, uncemented, low plasticity, brown, wet, fuel odor, no stains
						note: sand content increased at 178'
180			1.1			
						note: clay content increased at 182'
185			0.0			
						note: fine grained, subrounded to subangular gravel content increased at 189'
190			0.0		CL	CLAY WITH SAND, 70% clay, 30% fine to coarse grained, subrounded to subangular sand, uncemented, medium plasticity, brown to red, moist, no
						odor, no stains
						note: clay content increased at 194'
195			0.2			
						note: clay content increase (100%) at 196'
200						

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Project	Name:	S1012 EBR L	rilling			
	-					Boring ID: LSZ44-EBR
Project	Numbei	r: <u>9101110001.</u> 5	5310.02	Da	ate: 5-1	10-16
	Location					Logged By: Kyle Keegan
	on and D	atum: N/A				Project Manager: Gwen Minnier
	Start Da		-16			Drilling Contractor: Yellow Jacket Drilling
		tion Date:				Drilling Method: Sonic
Total D	epth (ft t to Water	ogs): 230				Drilling Equipment: 6" I.D., 8" O.D. Sampling Method: Continuous Core
Depui	to water	(ft bgs): ~146)			Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
200			3.8		CL	CLAY WITH SAND, continued
205			5.3			note: cementation increased at 205' note: sand content increased & fine grained, subrounded to subangular increased at 209'
			14.8	None		note: faint fuel odor at 212' note: clayey sand lens about 1' thick at 213'
215			1.8			note: clay content increased at 216'
220						
220			2.8		SC	CLAYEY SAND, 70% fine to medium grained, subrounded to subangular sand, 30% clay (some silt), uncemented, low plasticity, reddish-brown, moist, mild fuel odor, no stains

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Project	Name:	S1012 EBR L	Jrilling			Basing ID. L S744-FBR
						Boring ID: LSZ44-EBR
		r: <u>9101110001.</u>	5310.02	D	ate: <u>5-1</u>	
	Location					Logged By: Kyle Keegan Project Manager: Gwen Minnier
	ion and D g Start Da		-16			Project Manager: Gwen Minnier Drilling Contractor: Yellow Jacket Drilling
		tion Date:				Drilling Method: Sonic
Total D	Depth (ft l	ogs): 230				Drilling Equipment: 6" I.D., 8" O.D.
Depth	to Water	(ft bgs): ~146	3	1		Sampling Method: Continuous Core
Depth Below Ground Surface (feet)	Graphical Log	Sample ID	PID Meter Reading (ppm)	LNAPL Test (Red, Pink, None)	Unified Soil Classification System	Soil Classification, Description and Notes Name (USCS Symbol): material with description [i.e. % by weight, gradation, angularity] starting with largest percent, cementation, plasticity, color, moisture, staining, odor. Any additional descriptive information may be included in the soil description or notes.
225	1///		3.2		SC	CLAYEY SAND, continued
						note: clay content decreased, no odor (15%), coarse grained sand content increased at 226'
230	/ / /-		2.3			Total depth = 230'
235						
240						
245						
240						
250						